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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/728,097	12/05/2003	Hyun-kwon Chung	1793.1113	7294
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STEIN, MCEWEN & BUI, LLP 1400 EYE STREET, NW SUITE 300 WASHINGTON, DC 20005			EXAMINER AUGUSTINE, NICHOLAS	
			ART UNIT	PAPER NUMBER
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/728,097

Applicant(s)

CHUNG ET AL.

Examiner

Nicholas Augustine

Art Unit

2179

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 November 2007.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____.

- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____.

DETAILED ACTION

- A. This action is in response to the following communications: Amendment filed: 11/02/2007. This action is made **Non-Final**.
- B. Claims 1-14 remain pending.

Claim Rejections - 35 USC § 101

1. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

2. Claim 9 rejected under 35 U.S.C. 101 because claim 9 is directed to non-statutory subject matter. The claimed invention does not fall within at least one of the four categories of patent eligible subject matter recited in 35 U.S.C. 101 (process, machine, manufacture, or composition of matter) as disclosed in the specification in paragraph 68, computer readable recording medium can be in a form of a signal. The current practice and understanding of the Office is that signals carrying and storing instructions or other functional descriptive material or a computer program per se is not included in one of the statutory categories of invention and is believed to be non-statutory, more information about this matter is covered in the Annex IV of the Interim Guidelines for Subject matter Eligibility.

http://www.uspto.gov/web/offices/pac/dapp/opla/preognotice/guidelines101_20051026.pdf

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1-14 are rejected under 35 U.S.C. 102(e) as being anticipated by Dang, Nga T. (US 7,216,300 B2), herein referred to as "Dang".

As for independent claim 1, Dang teaches a method of executing markup document applet by a browser, comprising: receiving a request for executing an applet from the browser (col.2, lines 17-23); determining whether the applet is a bound applet or an unbound applet (col.2, lines 49-52); loading the requested applet into a virtual machine; and if the applet is an unbound applet (col.3, lines 19-22), immediately issuing predetermined commands to the virtual machine to first set the unbound applet into an initiate state and then into a start state, respectively (figure 4; col.1, lines 17-30; col.3, line 2).

As for dependent claim 2, Dang teaches the method of claim 1, further comprising: if the unbound applet is completed, issuing predetermined commands to the virtual machine

to set the unbound applet into a stop state and into a destroy state, respectively (figure 4; col.4, lines 56-67).

As for dependent claim 3, Dang teaches the method of claim 1, further comprising: if determined that the applet is a bound applet and determined by the browser that a markup document connected to the bound applet has a grammatically correct structure, issuing a predetermined command to the virtual machine to set the bound applet into an initiate state (figure 4; col.4, lines 46-48).

As for dependent claim 4, Dang teaches the method of claim 3, further comprising: issuing a command to the virtual machine each time the markup document is displayed to set the bound applet into a start state while the markup document is being rendered by the browser; if the markup document is unloaded by the browser, issuing a command to the virtual machine to set the bound applet into a stop state; and issuing a command to the virtual machine to set the applet into a destroy state to delete the bound applet (figure 4; col.4, lines 49-67).

As for independent claim 5, Dang teaches an apparatus executing a markup document applet, comprising: a memory which stores an input markup document (col.3, lines 12-18); a virtual machine which executes an applet related to the markup document (col.3, lines 14-22); a browser which receives the markup document from the memory and outputs information on an applet related to the markup document included

in the markup document (col.3, lines 23-37); and an application manager which receives the applet information from the browser, retrieves the applet from an external data source, controls the retrieved applet to be stored in the memory, receives a request for executing the stored applet, loads the stored applet into the virtual machine, determines whether the loaded applet is a bound applet or an unbound applet, and if the loaded applet is an unbound applet, immediately issues predetermined commands to the virtual machine to first set the loaded unbound applet into an initiate state and then into a start state, respectively (col.3, lines 5-67 and col.4, lines 11-37).

As for dependent claim 6, Dang teaches the apparatus of claim 5, wherein when the virtual machine informs the application manager that the unbound applet is completed, and the application manager issues a command to the virtual machine to set the unbound applet into a stop state and issues another command to the virtual machine to set the unbound applet into a destroy state to unload the unbound applet from the virtual machine (col.4, lines 56-67).

As for dependent claim 7, Dang teaches the apparatus of claim 5, wherein if the applet is a bound applet, the browser informs the application manager that the markup document connected to the bound applet has a grammatically correct structure, and the application manager issues a command to the virtual machine to set the bound applet into an initiate state (col.4, lines 46-48).

As for dependent claim 8, Dang teaches the apparatus of claim 7, wherein the application manager further: issues a command to the virtual machine to set the bound applet into a start state while the markup document is being rendered by the browser, issues another command to the virtual machine to set the bound applet into stop state, if the markup document is unloaded by the browser, repeatedly issues the initiate and stop commands to the virtual machine to start and stop the bound applet upon redisplaying the markup document by the browser, and issues a command to the virtual machine to set the bound applet into a destroy state to unload the bound applet from the virtual machine (col.4, lines 49-67).

As for independent claim 9, Dang teaches a computer-readable recording medium storing at least one program controlling an interactive contents reproduction apparatus to execute a markup applet according to a process comprising: receiving a request for executing an applet from the browser (col.2, lines 17-23); determining whether the requested applet is a bound applet or an unbound applet (col.2, lines 49-52); loading the requested applet into a virtual machine (col.3, lines 19-22); and if the requested applet is an unbound applet, immediately issuing predetermined commands to the virtual machine to first set the requested loaded unbound applet into an initiate state and then into a start state, respectively (figure 4; col.1, lines 17-30 and col.3, line 2).

As for independent claim 10, Dang teaches an interactive digital versatile disc (DVD) player, comprising: a programmed computer processor controlling the player according

to a process (col.3, lines 12-13) comprising: processing a markup document classifying tagged applets into bound and unbound applets to display interactive contents (col.3, lines 19-32), determining whether an applet execution of the markup document is a bound applet or an unbound applet according to the classifying, and if the applet is an unbound applet, launching the unbound applet by immediately issuing predetermined commands to first set the unbound applet into an initiate state and then into a start state, respectively (col.3, lines 46-67; figures 2-4).

As for dependent claim 11, Dang teaches the player of claim 10, wherein the programmed computer processor launches the unbound applet without synchronization with the markup document processing (col.2, lines 49-52; executing applet without markup document processing).

As for dependent claim 12, Dang teaches the player of claim 10, wherein the launched unbound applet continuously executes independent of the markup document processing (col.2, lines 49-52).

As for independent claim 13, Dang teaches a method, comprising: classifying tagged applets of a markup document; and controlling different execution life cycles of the tagged applets according to the classifying (figure 4; col.4, lines 46-67; note the analysis of claim 1 above).

As for dependent claim 14, Dang teaches the method of claim 13, wherein the classifying comprises classifying the tagged applets into bound and unbound applets, and wherein according to the controlling, execution life cycle of a bound applet depends on the markup document life, and the execution life cycle of an unbound applet is independent of the markup document life (figure 4; col.4, lines 46-67; col.2, lines 49-52; wherein applet executes without markup document processing).

(Note:) It is noted that any citation to specific, pages, columns, lines, or figures in the prior art references and any interpretation of the references should not be considered to be limiting in any way. A reference is relevant for all it contains and may be relied upon for all that it would have reasonably suggested to one having ordinary skill in the art. In re Heck, 699 F.2d 1331, 1332-33, 216 USPQ 1038, 1039 (Fed. Cir. 1983) (quoting In re Lemelson, 397 F.2d 1006, 1009, 158 USPQ 275, 277 (CCPA 1968)).

Response to Arguments

Applicant's arguments with respect to claims 1-14 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of


the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Inquires

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nicholas Augustine whose telephone number is 571-270-1056. The examiner can normally be reached on Monday - Friday: 7:30- 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Weilun Lo can be reached on 571-272-4847. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


N. Augustine
January 7, 2008

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